ter will take up no more room then 45. of the freſh. Or reciprocally 45 pints of ſalt-water weigh as much as 46 of freſh.

But I found the proportion of Brine to freſh Water to be near 13 to 12: Suppoſing therefore G H M to repreſent the Sea, and F I the height of the Mountain above the Superficies of the Sea, F M a Cavern in the Earth, beginning at the bottom of the Sea, and terminated at the top of the Mountain, L M the Sand at the bottom, through which the Water is as it were ſtrained, ſo as that the freſher parts are only permitted to tranſude, and the ſaline kept back; if therefore the proportion of G M to F M be as 45 to 46, then may the Cylinder of Salt-water G M make the Cylinder of Freſh-water to riſe as high as E, and to run over at N. I cannot here ſtand to examine or confute their Opinion, who make the depth of the Sea, below its Superficies, to be no more perpendicularly meaſured then the height of the Mountains above it: 'Tis enough for me to ſay, there is no one of thoſe that have aſſerted it, have experimentally known the perpendicular of either; nor ſhall I here determine, whether there may not be many other cauſes of the ſeparation of the freſh water from the ſalt, as perhaps ſome parts of the Earth through which it is to paſs, may contain a Salt, that mixing and uniting with the Sea-ſalt, may precipitate it; much after the ſame manner as the *Alkalizate* and *Acid Salts* mix and precipitate each other in the preparation of *Tartarum Vitriolatum.* I know not alſo whether the exceeding cold (that muſt neceſſarily be) at the bottom of the Water, may not help towards this ſeparation, for we find, that warm Water is able to diſſolve and contain more Salt, then the ſame cold; inſomuch that Brines ſtrongly impregnated by heat, if let cool, do ſuffer much of their Salt to ſubſide and cryſtallize about the bottom and ſides. I know not alſo whether the exceeding preſſure of the parts of the Water one againſt another, may not keep the Salt from deſcending to the very bottom, as finding little or no room to inſert it ſelf between thoſe parts, protruded ſo violently together, or elſe ſqueeze it upwads into the ſuperiour parts of the Sea, where it may more eaſily obtain room for it ſelf, amongſt the parts of the Water, by reaſon that there is more heat and leſs preſſure. To this Opinion I was ſomewhat the more induced by the relations I have met with in *Geographical Writers*, of drawing freſh Water from the bottom of the Sea, which is ſalt above. I cannot now ſtand to examine, whether this natural perpetual motion may not artificially be imitated: Nor can I ſtand to anſwer the Objections which may be made againſt this my Suppoſition: As, Firſt, How it comes to paſs, that there are ſometimes ſalt Springs much higher then the Superficies of the Water? And, Secondly, Why Springs do not run faſter and ſlower, according to the varying height made of the Cylinder of Sea-water, by the ebbing and flowing of the Sea?

As to the Firſt, In ſhort, I ſay, the freſh Water may receive again a ſaline Tincture near the Superficies of the Earth, by paſſing through ſome ſalt *Mines*, or elſe many of the ſaline parts of the Sea may be kept back, though not all.

And

And as to the Second, The ſame *Spring* may b
divers *Caverns*, coming from very far diſtant parts
it may in one place be *high*, in another *low water*
the *Spring* may be equally ſupply'd at all times. C
be ſo ſtraight and narrow, that the water not hav
paſſage through it, cannot upon ſo ſhort and quick
be able to produce any ſenſible effect at ſuch a di
to confirm this *hypotheſis*, there are many *Examples*
rians, of *Springs* that do ebb and flow like the Sea
recorded by the Learned *Camden*, and after him b
this *Iſland*: One of which, they relate to be on th
by the ſmall Village *Kilken* in *Flintſhire*, *Maris a*
ribus ſuas evomit & reſorbet Aquas; Which at cer
falleth after the manner of the Sea. A Second
near *Caermarden*, at a place called *Cantred Bichan*
raldus) *naturali die bis undis deficiens*, *& toties*
imitatur inſtabilitates; That twice in four and two
flowing, reſembleth the unſtable motions of the
of which two may be eaſily made out, by ſuppoſing
they are fed, to ariſe from the bottom of the ne
Well upon the River *Ogmore* in *Glamorganſhire*, and
which *Camden* relates himſelf to be certified, by a
Friend of his that obſerved it, *Fons abeſt hinc*, *&c*
too long to be inſerted, but the ſubſtance is this; T
flows quite contrary to the flowing and ebbing of
for 'tis almoſt empty at Full Sea, but full at Low w
pen from the Channel by which it is ſupplied, whi
bottom of a Sea very remote from thoſe parts, and
much differing from thoſe of the approximate ſho
Weſtmorland, near the River *Loder*; *Qui inſtar E*
procantibus undis fluit & refluit, which ebbs and flo
This may proceed from its being ſupplyed from ma
from ſeveral parts of the Sea, lying ſufficiently diſta
times of High-water differing enough one from
whenſoever it ſhall be High water over any of th
Channels begin, it ſhall likewiſe be ſo in the Well;
ſition.

A Seventh *Query* was, Whether the *diſſolution* o
dies, whether fluid or ſolid, with ſaline or other Li
be attributed to this Principle of the congruity of
diſſolvents? As of Salt in Water, Metals in ſeveral
Gums in Oyls, the mixing of Wine and Water, *&*
pitation be not partly made from the ſame Princi
ſay *partly*, becauſe there are in ſome Diſſolutions, ſo
current.

I ſhall laſtly make a much more ſeemingly ſtrang
and that is, Whether this Principle, well examine